Rec'd PCT/PTO 09 JUN 2006

PTO-1390 (Rev. 07-2005) Approved for use through 3/31/2007. OMB 0651-0021 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) **CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER 9611 (Ifiknő (n. see 37 CFR 1.5)

INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PCT/US04/042463 December 22, 2004 TITLE OF INVENTION Microbial Detection and Quantification APPLICANT(S) FOR DO/EO/US J. Gavin MacDonald, Stephanie Martin & Ning Wei Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: 1. XX This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items 3 (5), (6), (9) and (21) indicated below. k X The US has been elected (Article 31). 5. XX A copy of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. c. [X] is not required, as the application was filed in the United States Receiving Office (RO/US). An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). 7. XX Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. XX An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). An English language translation of the annexes of the International Preliminary Examination Report under PCT 10. Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 12. XX 13. A preliminary amendment. 14. LXX An Application Data Sheet under 37 CFR 1.76. A substitute specification. 16. LXX A power of attorney and/or change of address letter. 17. L A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825. 18. 🖵 A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. ___ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Page 1 of 3

AP3 Rec'd PCT/PTO 09 JUN 2005

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it displays a valid OMB control number.

U.S. APPLICATION NO. (Introduction Sector CFR 1.5) ATTORNEY'S DOCKET NUMBER INTERNATIONAL APPLICATION NO. PCT/US04/042461 19611.1 Other items or information: 20. Return Postcard The following fees have been submitted **CALCULATIONS** PTO USE ONLY Basic national fee (37 CFR 1.492(a))......\$300 300.00 Examination fee (37 CFR 1.492(c)) 200.00 \$ If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)......\$0 All other situations.....\$200 400.00 23. X Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)......\$0 \$ Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority.....\$100 International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB......\$400 All other situations.....\$500 900.00 TOTAL OF 21, 22 and 23 = Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. RATE Number of each additional 50 or fraction **Total Sheets** Extra Sheets thereof (round up to a whole number) /50 = x \$250 - 100 = Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration \$ after the date of commencement of the national stage (37 CFR 1.492(h)). NUMBER FILED NUMBER EXTRA RATE CLAIMS \$ 0 \$ 50 \$ 0.00 Total claims 20 - 20 = 0 Independent claims 3 - 3 = \$200 0.00MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$360 \$ TOTAL OF ABOVE CALCULATIONS = \$ 0.00 Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2. 0.00 SUBTOTAL = \$ Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). TOTAL NATIONAL FEE = \$ 900.00 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied 40.00 \$ by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property TOTAL FEES ENCLOSED = \$ 940.00 Amount to be \$ refunded: Amount to be \$ 940.00 charged

AP3 Rec'd PCT/PTO 09 JUN 2005 10/582262 PTO-1390 (Rev. 07-2005) U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

a. A check in the amount of \$ to cover the above	
b. X Please charge my Deposit Account No.11-0875 in the amount of \$_A duplicate copy of this sheet is enclosed.	900.00 to cover the above fees.
c. $\boxed{\text{X}}$ The Commissioner is hereby authorized to charge any additional fees whice Account No. $\boxed{11-0875}$. A duplicate copy of this sheet is enclosed.	h may be required, or credit any overpayment to Deposit
d. Fees are to be charged to a credit card. WARNING: Information on this for be included on this form. Provide credit card information and authorization	m may become public. Credit card information should not on PTO-2038.
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.	
SEND ALL CORRESPONDENCE TO: Nancy M. Klembus Kimberly-Clark Worldwide, Inc. 401 N. Lake Street Neenah, Wisconsin 54956	Nancy M. Klembus NAME 40,051 REGISTRATION NUMBER

10/582262

IN THE UNITED STATES PATENT AND TRA

Applicants:

Jason Lye et al.

Docket No.:

19611.1

Filed:

Herewith

Date:

June 9, 2006

For:

MICROBIAL DETECTION AND QUANTIFICATION

International

Application Number:

PCT/US04/042461

Int'l Filing Date:

December 22, 2004

Express Mailing Label: EV 064854435 US

MAIL STOP PCT Commissioner For Patents P.O. Box 1450 Alexandria, VA 22313-1450

Enclosed are:

- Transmittal Letter to the United States Designated/Elected Office Concerning Submission Under 1. 35 U.S.C. 371.
- Initial Application Data Sheet. 2.
- A Combined Declaration and Power of Attorney. 3.
- As assignment of this invention, including a 37 CFR 3.73(b) statement, to Kimberly-Clark 4. Worldwide, Inc. and completed Form PTO 1595 Recordation Form Cover Sheet. Please charge the \$40.00 assignment recording fee, pursuant to 37 CFR 1.21(h), to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875.

EXPRESS MAIL CERTIFICATE

"Express Mail" label nu	mber <u>EV 064854435 US</u>
Date of Deposit	lune 9, 2006
Post Office to Address	e following attached paper or fee is being deposited with the United States Postal Service "Express Mail ee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner for D, Alexandria, VA 22313-1450.

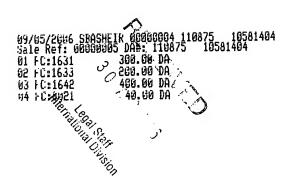
Stephanie B. Deal

(Typed or printed name of person mailing paper or fee)

(Signature of person mailing paper or fee)

10/582262 AP3 Rec'd PCT/PTO 09 JUN 2006

USPTO PCT HELP DESK agent said <u>not</u> to send specification/drawings in with this Stage II PCT application.



(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 30 June 2005 (30.06.2005)

(10) International Publication Number WO 2005/059162 A2

(51) International Patent Classification7:

C12Q 1/00

(74) Agent: JOHNSTON, Jason, W.; Dority & Manning, P.A.,

(21) International Application Number:

PCT/US2004/042461

(22) International Filing Date:

16 December 2004 (16.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

10/737,574

16 December 2003 (16.12.2003)

(71) Applicant (for all designated States except US): KIM-BERLY-CLARK WORLDWIDE, INC. [US/US]; 401 N. Lake Street, Neenah, WI 54956 (US).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LYE, Jason [GB/US]; 799 Kirkwood Avenue, S.E., Atlanta, GA 30316 (US). MACDONALD, John, Gavin [US/US]; 1472 Knollwood Terrace, Decatur, GA 30033 (US). MARTIN, Stephanie [US/US]; 113 Normandy Drive, Woodstock, GA 30188 (US). WEI, Ning [US/US]; 530 Summerhill Drive, Roswell, GA 30075 (US).

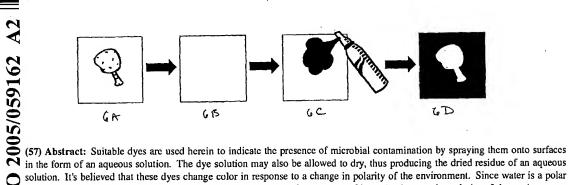
- P.O. Box 1449, Greenville, SC 29602-1449 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available); AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, **ZW**.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MICROBIAL DETECTION AND QUANTIFICATION



solution. It's believed that these dyes change color in response to a change in polarity of the environment. Since water is a polar solvent and most bacteria are made from non-polar substances, the presence of bacteria changes the polarity of the environment, triggering a change visible by the unaided eye.